

REMARKS

The replacement paragraph [27] presented in the reply to the Office Action mailed October 10, 2008, as filed on January 12, 2009, contains four occurrences of a typographical artifact. The amended paragraph [27] set forth above corrects this error.

The examiner has rejected claims 5, 7-9, 11-13 and 15 under 35 USC 103 over applicant's admitted prior art (APA) in view of Silva et al and has rejected claims 6, 10 and 14 over APA in view of Silva et al and further in view of Hann. Applicant has now canceled claims 5-12.

The subject matter of claim 13 is a door closer including a door closer body (corresponding to the body 28 in the case of the embodiment shown in FIG. 6) formed with at least one channel (the channel 81 or 82 shown in FIG. 6) for flow of a pressure medium controlling operation of the door closer and also formed with at least one bore (not referenced) that intersects the channel and has first and second segments at opposite respective sides of the channel. The door closer further includes a control device (510A or 510B) fitted in the bore and having first and second opposite ends.

In accordance with claim 13, the control device includes a guiding part (32) at a first end of the control device and a support part (53) at the second end of the control device, and a control part (51) between the guiding part and the support part. The guiding part is located in the first segment of the bore and has a thread fillet (33) engaging the door closer body and supporting the control device relative to the door closer body. The support part is located in the second segment of the bore. A collar (54) of resilient material is located in the second segment of the bore and surrounds the support part of the control device. The collar is under compression whereby the collar supports the second end of the control device relative to the door closer body and restrains the control device against rocking and swaying movement relative to the door closer body due to flow of pressure medium in the channel. The control part of the control device has a bevelled inner end (52) for cooperating with the door closer body to

restrict pressure medium flow in the channel. The control device can be moved in its axial direction by turning the control device supported on the door closer body for adjusting the restriction of the pressure medium flow by the control part.

As described with reference to FIGS. 2 and 3, the control device of APA includes a guiding part 32 and a control part 35 having a bevel 36. The bevel 36 cooperates with the door closer body to restrict flow of pressure medium in the channel 23. When the bevelled end of the control part 35 enters the blind segment of the bore, axial movement of the control device provides fine control over the restriction on the pressure medium flow.

Silva et al discloses a fluid friction controller that comprises an outer housing member 13 in which is located an inner member 20 having three distinct length segments. The inner member 20 comprises a pair of cylindrical end bearings 21, 22 that ride in close sliding relationship with the inside wall of the opening 13, and a tapered surface 26 between the end bearings 21, 22.

The examiner asserts that it would have been obvious in view of Silva et al to have provided the control device shown in FIG. 3 with a support part and a collar. The examiner considers that the region designated A in the annotated FIG. 1 constitutes a support part within the meaning of claim 13 and that the element designated B in the annotated FIG. 1 is an apt counterpart of the collar referred to in claim 13. Applicant respectfully disagrees.

A rejection of claim 13 under 35 USC 103 based on the combination of APA and Silva et al is not justified simply by pointing out that Silva et al teaches a valve having a beveled end of a control part, a support part at the beveled end of the control part, and a bearing providing a supporting surface that can be placed against the housing body. Applicant submits that in order to carry the burden of establishing a *prima facie* case of obviousness, the examiner must show that there are enough similarities between the fluid friction controller of Silva et al and the door closer of APA that a person of ordinary skill in the art would see a benefit

to applying features of the inner member 20 shown by Silva et al to the control device 21 or 22 of the door closer of APA.

Silva et al does not disclose the practical application of the fluid friction controller in any detail, except that it is connected between a pressure compensating pump 31 and a resistance 27. The purpose of the controller is to control flow while avoiding the factors that typically generate noise producing vibrations. In the condition illustrated in FIG. 1, the orifice provided by the fluid friction controller is closed, whereas moving the inner member 20 the left of FIG. 1 opens the entrance to the orifice and permits fluid to flow from the inlet region 16 into the outlet region 18. The angle of divergence between the inner surface of the outer housing member 12 and the tapered exterior surface 26 of the inner member 20 are related so that the fluid passing through the orifice remains attached to the friction control surfaces along the entire length of the orifice.

Applicant submits that there is no basis in the prior art for applying features of the fluid friction controller of Silva et al to the door closer of APA when the record does not show any functional similarity between the APA and the disclosure of Silva et al and, moreover, the inlet line 15 and outlet line 17 of Silva et al must be spaced axially of the inner member 20 whereas in the door closer shown in APA the bore containing the control device intersects a channel for controlling flow of fluid along the channel.

The examiner asserts that the element B shown in the annotated FIG. 1 is a collar, implying that it is a separate element from the other portions of the inner member 20. Applicant respectfully disagrees. The fact that the element B is referred to in Silva et al as an end bearing does not imply that the element B is distinct from the other portions of the inner member 20 but merely specifies its function. Applicant submits that there is no clear disclosure in Silva et al that the element B is other than integral with the other portions of the inner member 20. Therefore the element B does not constitute a collar.

Claim 13 specifies that the collar is under compression. Applicant acknowledges that Silva et al refers to seals being furnished to prevent fluid from passing between the bearings and the inside wall of the housing opening (column 4, lines 27-30), which confirms that absent the seals the element B would not be under compression and also implies that the element B is integral with the other portions of the inner member 20, since otherwise a seal between the element B and the inside wall of the housing opening would not prevent flow of fluid past the element B.

Applicant previously suggested that application of the teaching of Silva et al to APA would degrade the control function of APA, and the examiner responded that the test of obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. Applicant agrees that it is important to consider what the combined teachings of the references would have suggested to those of ordinary skill in the art. Applicant submits that the person of ordinary skill in the art is rational and does not waste time or effort by making modifications that offer no advantage. Therefore, a person of ordinary skill in the art, presented with the disclosures of APA and Silva et al, would not be induced to make a modification that provided no advantage. In order to determine whether the combined teachings of APA and Silva et al would have suggested to a person of ordinary skill in the art that the element B of Silva et al should be applied to the control device of APA it is necessary to determine what advantage would be gained by such a modification. The examiner states that applying the "support part" and "collar" of Silva et al to the valve of APA would allow for a close sliding relationship with the inner wall of the door closer body but has not explained how a close sliding relationship of this nature would be advantageous. Silva et al states that seals may be provided to prevent fluid contained within the inlet and exit regions from passing between the bearings and the inside wall of the housing opening. This might be advantageous in the case of Silva et al in order to prevent leakage. However, in the case of APA the bore

segment in which the "collar" would be located is blind and therefore fluid cannot leak away through that bore segment. Therefore, the record does not show any advantage that would arise by modifying the the door closer of APA in view of Silva et al.

The examiner relies on the discussion of seals by Silva et al as suggesting that the bearing 21 or 22 may be under compression, but claim 13 does not suggest that the collar serves a sealing purpose.

The examiner has suggested that the wording in claim 13 regarding the collar being under compression is functional. Applicant respectfully disagrees. Whether a collar is under compression is a matter of its current condition, and a statement that the collar is under compression is not a functional statement regarding the condition of the collar at some time in the future.

In view of foregoing, applicant submits that the subject matter of claim 13 is not disclosed or suggested by the cited references, whether taken singly or in combination. Therefore claim 13 is patentable and it follows that the dependent claims 14-17 also are patentable.

Applicant submits that the examiner's rejection of claim 15 is based on speculation as to the materials that might be used in the controller shown by Silva et al.

The examiner relies on the disclosure by Hann of a V-shaped slot 9 that serves as a flow controlling means as rendering obvious the feature of the chase provided in the collar of claim 14. The examiner argues that it would have been obvious to one of ordinary skill in the art to apply the flow controlling means of Hann to the control valve 21 of APA in order to control the flow of fluid between chambers. Applicant respectfully points out that if the control valve 21 of APA were modified by providing a collar, as recited in claim 13, the collar would be located in the blind segment of the bore containing the control device. Thus, there would be no possibility of fluid flow past the collar, such that it would be desirable to control the flow of fluid.

The arguments presented above in support of claim 13 are also applicable to claim 18. Therefore, claim 18 and the dependent claims 19-23 are patentable.

Respectfully submitted,

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